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STATE OF MISSOURI

Matt Blunt, Governor • Doyle Childers, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

March 29, 2006

Mr. Keith Piontek, P.E.
TRC
201 Beverly, Suite B
Eureka, MO 63025

Dear Mr. Piontek:

Thank you for your review and comments on Missouri's Risk-Based Corrective Action (MRBCA) Technical Guidance, received in a letter dated February. 13, 2006. This letter is in response to your comments.

Comment #1: I apologize for any confusion on this issue. This issue has been handled in the Tanks Section of the Hazardous Waste Program and the Vapor Pathway Subgroup. The intent all along has been to adopt the entire methodology, as you also suggest. Minor revisions in wording have been made to reflect its application to a broader range of sites. We have incorporated Appendix C as Appendix H, and the Standard Operating Procedure (SOP) is posted on the MRBCA website at the following address: http://www.dnr.mo.gov/alpd/hwp/tanks/mrbca-pet/mrbca-pet-tanks.htm

Comment #2: These issues were handled by the Vapor Pathway Subgroup, which was coordinated by the Tanks Section. This issue has been referred to the Tanks Section for its consideration.

Comment #3: Adequate purging of the sampling equipment is essential to collect a soil vapor sample that is representative of the soil vapor concentrations and not diluted by residual air in the sampling equipment. In situations where removal of three sampling system volumes will cause (breakthrough) ambient air to be sucked in, the remediating party should contact the Department of Natural Resources and suggest alternative purging volumes or suggest that the location of sampling be moved. The MRBCA process is flexible in that it allows deviations from this condition if adequately supported by technical considerations, which should be documented prior to performing the work in an approved work plan.

Comment #4: Only sites listed on the National Priorities List (NPL sites) will be exempted from use of Missouri's RBCA process; therefore, many Superfund sites can be handled by MRBCA. In order to simplify this calculation, the department has included spreadsheets in the Technical Guidance to perform this exercise, and we will make the electronic spreadsheet available on the MRBCA website.

Comment #5: Our December 16, 2005, response to EPA concerning the construction worker soil ingestion rate was never intended to advocate changing the 100 mg/day default ingestion rate that was previously adopted by the work group. The selected study findings referenced in our letter to EPA were merely intended to reinforce that considerable uncertainty exists with respect to soil ingestion rates and to provide further support for use of the 100 mg/day rate. We apologize if it appeared to you that we were making a case for changing to a lower default ingestion rate based on the studies referenced in our letter. The Stanek and Calabrese study was extremely small (based on only 10 adults). The 50 mg/day adult soil ingestion rate from EPA's Exposure Factors Handbook has sometimes been used for indoor (non-residential) workers whose potential for ingestion of contaminated soil is far less than that for construction workers. At this time, we intend to retain the 100 mg/day default soil ingestion rate for both commercial and construction workers. This default soil ingestion rate is at the low end of the range used by many other states and EPA Regions. We will remain receptive to revisiting this and any other risk-based issues in the future based on new studies or information. Of course, flexibility to develop site-specific soil ingestion rates for the construction worker will continue to exist at Tier III of MRBCA .

Thank you again for your review. I trust this response adequately addresses your concerns, but if you wish to discuss further, please feel free to contact me at the Hazardous Waste Program, P.O. Box 176, Jefferson City, MO 65102-0176 or by telephone at (573) 751-6998.

Sincerely,

HAZARDOUS WASTE PROGRAM

(original signed by Robert Geller)

Robert Geller
Director

RG:lvj